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ABSTRACT OF THE DISCLOSURE

A process for preparing copolymers via free-radical-initiated polymerization of one or more vinyl esters, ethylene, and also, where appropriate, other ethylenically unsaturated monomers copolymerizable therewith, at a pressure of from 5 to 100 bar abs., in an aqueous medium, by emulsion or suspension polymerization, which comprises, after termination of the polymerization, reclaiming residual unreacted ethylene by depressurizing the polymerization reaction mixture to a pressure of from 0.1 to 5 bar absolute, comprising a gas phase containing residual ethylene gas to a pressure of from 2 to 20 bar absolute, absorbing the gas phase into vinyl ester(s), and reusing the resulting solution of ethylene in vinyl esters(s) in a further polymerization.